

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer-implemented method for processing a plurality of toponyms, wherein each toponym of the plurality of toponyms has one or more readings, said method comprising:

~~based on an analysis of all the documents (a) for each document within a large corpus of documents, identifying geo-textual correlations among readings of toponyms within the plurality of toponyms, wherein the geo textual correlations are statistics derived for the corpus of documents rather than for any individual document within the corpus of documents; and~~

~~(b) selecting a for each toponym within from the plurality of toponyms and for that selected toponym, selecting a reading of that toponym, using the identified geo textual correlations to generate and for that selected toponym-reading pair computing a value for a confidence that the selected toponym means that selected reading an occurrence of that toponym within a particular document refers to a corresponding particular geographic location, wherein computing said value involves a summation over all documents in the corpus in which geo-textual correlations were identified that involved that toponym-reading pair.~~

2. (Currently Amended) The computer-implemented method of claim 1 further comprising using the value for the confidence generated for the selected toponym-reading pair ~~each toponym within the plurality of toponyms~~ to rank documents according to their relevance to a search query.

3. (Currently Amended) The computer-implemented method of claim 1 further comprising selecting a set of starting values which ~~value for the confidence for that selected toponym-pair each toponym within the plurality of toponyms establishes an initial value for the confidence that the occurrence of that toponym within the particular document refers to the corresponding particular geographic location, and wherein computing using the identified geo textual correlations to generate~~

values value for confidences involves modifying the initial starting value[[s]] based on the identified geo-textual correlations within the corpus.

4. (Currently Amended) The computer-implemented method of claim 3 wherein selecting the set of starting values for the confidences for the plurality of toponyms involves using a method of uniform priors.

5. (Original) The computer-implemented method of claim 1 wherein identifying geo-textual correlations involves identifying within documents in the corpus toponyms that have associated geographic locations that are nearby to each other.

6. (Original) The computer-implemented method of claim 1 wherein identifying geo-textual correlations involves identifying spatial correlation among geographic references of toponyms that are in textual proximity.

7. (Original) The computer-implemented method of claim 6 wherein textual proximity means within the same document.

8. (Original) The computer-implemented method of claim 6 wherein textual proximity means within the same document or any document closely linked with said same document.

9. (Original) The computer-implemented method of claim 1 further comprising processing the corpus by a named entity tagger prior to identifying the geo-textual correlations.

10. (Currently Amended) A computer-implemented method of generating information useful for ranking a target document that includes a plurality of toponyms for which there is a corresponding plurality of (toponym, place) pairs, ~~there being associated with each (toponym, place) pair of said plurality of (toponym, place) pairs a corresponding value for a confidence that the toponym of that (toponym, place) pair refers to the place of that (toponym, place) pair;~~ said method comprising:

for a selected (toponym, place) pair of the plurality of (toponym, place) pairs that is found within the target document,

(1) obtaining a pre-computed initial number for a value for the value of the of a confidence that the toponym of the selected (toponym, place) pair refers to the place of the selected (toponym, place) pair, said pre-computed initial value number derived from a statistical observation about a large corpus of documents;

(2) determining if another toponym is present within the target document that has an associated place that is geographically related to the place referred to by the selected (toponym, place) pair; and

(3) if a toponym is identified within the target document that has an associated place that is geographically related to the place referred to by the selected (toponym, place) pair, boosting the value of the confidence for the selected (toponym, place) pair for the target document.

11. (Previously Presented) The computer-implemented method of claim 10, wherein determining if another toponym is present within the target document that has an associated place that is geographically related to the place referred to by the selected (toponym, place) pair involves identifying another toponym that has an associated geographic region that encompasses the place referred to by the selected (toponym, place) pair.

12. (Previously Presented) The computer-implemented method of claim 10, wherein determining if another toponym is present within the target document that has an associated place that is geographically related to the place referred to by the selected (toponym, place) pair involves identifying another toponym that has an associated place that is geographically nearby the place referred to by the selected (toponym, place) pair.

13. (Previously Presented) The computer-implemented method of claim 12, further comprising computing a geographical distance between the place associated with the identified toponym and the place referred to by the selected (toponym, place) pair.

14. (Previously Presented) The computer-implemented method of claim 13 wherein boosting involves calculating an adjustment value by computing an adjustment boosting function with the computed geographical distance as an input variable, said adjustment boosting function being monotonically decreasing for increasing values of the input variable.

15. (Original) The computer-implemented method of claim 14 wherein boosting involves deriving an initial boosting value from input including the calculated adjustment value.

16. (Previously Presented) The computer-implemented method of claim 15 wherein boosting involves applying a sigmoid function to the derived initial boosting value to compute a final boosting value and modifying the value of the confidence for the selected (toponym, place) pair by an amount determined by the final boosting value.

17. (Previously Presented) The computer-implemented method of claim 11 further comprising:

performing steps (1), (2) and (3) for each (toponym, place) pair among the plurality of (toponym, place) pairs that is found within the target document to generate modified values for the confidences for the plurality of (toponym, place) pairs that are found within the target document; and

using the modified values to rank the target document according to the target document's relevance to a search query.

18. (Canceled).

19. (Canceled).

20. (Previously Presented) The method of claim 1, wherein generating the value for a confidence that the selected toponym refers to a corresponding geographic location does not involve using information extrinsic to the corpus.

21. (New) The computer-implemented method of claim 1, further comprising repeating step (b) for each reading of that selected toponym.
22. (New) The computer-implemented method of claim 1, further comprising repeating step (b) for each toponym among the plurality of toponyms.